



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
PO. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,543	04/06/2000	Hidetoshi Kodama	Q58782	7511

7590 07/25/2003  
Sughrue Mion Zinn Macpeak & Seas PLLC  
2100 Pennsylvania Avenue NW  
Washington, DC 20037-3202

EXAMINER

TRAN, LY T

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 07/25/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/544,543	KODAMA ET AL.
	Examiner	Art Unit
	Ly T TRAN	2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 07 April 2003.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-27 and 30 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) 1-10, 13-27 and 30 is/are allowed.

6) Claim(s) 11 and 12 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Election/Restrictions***

1. Applicant's election without traverse of species identified by characteristics 1B and 2B in Paper No. 7 is acknowledged.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claim 11 is rejected under 35 U.S.C. 102(e) as being anticipated by Meyer (USPN 6,239,817).

With respect to claim11, Meyer discloses an ink jet recording apparatus comprising:

- A recording head having a dot formation element array including a plurality of dot formation elements arranged along a secondary scanning direction (Fig.4B: element 27, 27)
- A platen for holding a recording medium in position opposite the recording head (Fig.4B: element 30)

- Ink is squirted while the end portion of the recording medium is situated within the range of the dot formation element array, such as a portion of the ink is discarded into a hole (Fig.3: element 38) locally formed in the area of the surface of the platen (element 30) to thereby record data on the recording medium without leaving a margin on the edge (Fig.7: element 148) of the recording medium.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer (6,239,817) in view of Endo (6325,489).

Meyer fails to teach the recording head performs an interlaced recording operation.

Endo teaches the recording head performs an interlaced recording operation (Column 7: line 25-35).

It would have been obvious to one having ordinary skill in the art at the time the invention was made with an interlaced recording operation as taught by Endo. The motivation of doing so is to prevent banding or the production of blank areas in order to provide high quality color printing (Endo, USPN 6,325,489, Column 7: line 39-41).

***Allowable Subject Matter***

4. Claims 1-10, 13-27 and 30 are allowed.

The following is an examiner's statement of reasons for allowance:

- The primary reason for the allowance of claims 1 and 2 is the inclusion of the limitation of an ink jet print head comprising a platen having a first hole formed in an area of the platen opposite a downstream portion of the dot formation array with respect to the first direction wherein the first hole has a size in the first direction which is less than an entire portion of the dot formation element array. It is limitation found in each claims, as it is claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.
- The primary reason for the allowance of claims 3-10, 27 and 30 is the inclusion of the limitation of an ink jet print head comprising a platen having a first hole formed in an area of the platen opposite a downstream portion of the dot formation array with respect to the first direction and a second hole which is formed in an area of the platen opposite an upstream portion of the dot formation element array with respect to the secondary scanning direction and which guides the ink that has been discarded outside a top end of the recording medium when data are recorded on the recording medium without leaving a margin on the top end of the recording medium. It is limitation found in each claims, as it is

claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.

- The primary reason for the allowance of claims 13, 15-17, 19-26 is the inclusion of the limitation of an ink jet print head comprising a control section having a combination of a first operation mode in which a recording operation is performed by expanding recording data within a record region inside the both ends of the recording media and a second operation mode in which a recording operation is performed by expanding the recording data within a record region outside the both ends of the recording media and inside each outer edge of associated holes in the second direction and wherein each of the holes extends in the first direction beyond areas to be opposite to both ends of the dot formation element array. It is limitation found in each claims, as it is claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.
- The primary reason for the allowance of claims 14 and 18 is the inclusion of the limitation of an ink jet print head comprising a platen having plurality of holes wherein each of the holes extends in the first direction beyond areas to be opposite to both ends of the dot formation element array. It is limitation found in each claims, as it is claimed in the combination, that has

not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.

***Response to Arguments***

5. Applicant's arguments filed 4/7/03 have been fully considered but they are not persuasive.

Applicant's argument that the hole 38 in Meyer is not formed locally in the platen 30 is not persuasive because refer to figure 3; element 38 is an opening through the platen 30 therefore, it's locally formed in the platen 30. Therefore, Meyer still meets the limitation of the claim.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T TRAN whose telephone number is 703-308-0752. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 703-308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0967.

July 17, 2003



Stephen D. Meier  
Primary Examiner